

### Amendments to the Specification

Please replace the first full paragraph on page 2 of the application as originally filed with the following rewritten paragraph.

81 Besides absorbency and manufacturing ease, another desirable property of open-celled polymeric foams is the ability to make shaped or contoured absorbent cores having various shape configurations, fluid absorbency properties, and wear characteristics. Shaped or contoured absorbent cores made from foam materials have been disclosed in the diaper art. Shaped or contoured absorbent cores made from open-celled foam materials having particularly desirable fluid transport characteristics are disclosed in U.S. Patent 5,147,345 ('345 patent) issued to Young et al. on ~~issued~~ September 15, 1992 and hereby incorporated herein by reference. The Young et al. '345 core essentially comprises both a fluid acquisition/distribution component and a fluid storage/redistribution component. The fluid acquisition/distribution component is positioned within the absorbent article in such a way as to receive or contact aqueous body fluid which has been discharged into the absorbent article by the wearer of the article. The fluid storage/redistribution component in turn is positioned within the article to be in fluid communication with the fluid acquisition/distribution component.

Please replace the third full paragraph on page 3 of the application as originally filed with the following rewritten paragraph.

92 Additionally, it would be desirable to have an absorbent article that has an absorbent core having removable or replaceable components and a discontinuous backsheet, allowing saturated portions of the absorbent core to be removed through the backsheet discontinuity, thereby exposing unsaturated portions and allowing for prolonged use of ~~reusable~~ portions of an absorbent article.

Please replace the first paragraph of the Summary of the Invention section on page 3 of the specification as originally filed with the following rewritten paragraph. This section was previously amended in March 2000.

93 The present invention relates to absorbent articles suitable for absorbing and retaining aqueous body fluids. The absorbent article comprises at least one removable absorbent core component, a first waist region, a second waist region, and a crotch region positioned between the first waist region and the second waist region. The absorbent article further comprises: (a) a backsheet joined to a fluid pervious topsheet, the backsheet comprising a web and being substantially liquid impervious except at at least one discontinuity in the web; and (b) an absorbent core disposed between the topsheet and the backsheet, the absorbent core comprising a non-removable ~~first~~ absorbent core component disposed in at least the crotch region and at least one

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ended

removable ~~second~~ absorbent core component removably disposed in the first waist region and in fluid communication with the ~~first~~ non-removable absorbent core component; wherein the backsheet further comprises ~~first~~ access means for providing access to the removable ~~second~~ absorbent core component through the backsheet so that the removable ~~second~~ absorbent core component may be removed from the absorbent article through the backsheet without having to remove the absorbent article from a wearer, the ~~first~~ access means comprising ~~a first~~ the discontinuity and being positioned in the first waist region, a ~~first~~ recloseable flap secured over the ~~first~~ discontinuity, and a ~~first~~ fastener for recloseably joining the ~~first~~ flap to the backsheet.

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Please replace the third full paragraph on page 7 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in June 1998, November 1998, March 2000, and July 2003.

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As shown in FIGs. 1 and 2, when disposable diaper 60 is being worn, flap 42 may be secured over aperture 44 by suitable fasteners 43, such as VELCRO strips or adhesive strips (not shown). More preferably, ~~flaps 42 are~~ flap 42 is sealed with releasable adhesive, thereby providing for fluid impermeability when closed, but allowing for multiple openings and closings. Aperture 44 forms what may be described as a pocket or pouch, with absorbent core components, for example, back panel 30 being removable and replaceable through the ~~pocket~~ aperture 44. As shown in FIGs. 1 and 2, to remove back panel 30, flap 42 is lifted to form opening 41, and back panel 30 is extracted out of the absorbent article through aperture 44. To replace back panel 30, a fresh, dry absorbent component may be reinserted through backsheet 62 through aperture 44. FIG. 2 shows flap 42 42' in the closed position over ~~opening 41~~ aperture 44' corresponding to front panel 20 (shown in FIG. 1). In general, ~~front panel 20, (12/03) back panel 30, front panel 20,~~ and corresponding apertures 44 and 44' and flaps 42 and 42' are substantially similar, but need not be. In an alternative embodiment, it may only be desired to include one aperture 44 and flap 42, for example, for access to back panel 30.

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Please replace the first full paragraph on page 8 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in November 1998.

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In a preferred embodiment of the absorbent article of the present invention, a discontinuity in backsheet 62 forms an aperture, e.g., aperture ~~44~~ 44'', in the general proximity of ~~front and rear panels 20 and rear panel 30~~ 30 and/or aperture 44''' in the proximity of a front panel (not shown), as shown in FIGs. 3 and 4. In this preferred embodiment a backsheet pocket 45 may be affixed adjacent aperture ~~44~~ 44''. Backsheet pocket 45 ~~serves and backsheet pocket 45' serve~~ to contain

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and position ~~front panel 20 (not shown)~~ and back panel 30 30' and a front panel (not shown) as components made up of layered members, e.g., individual back panel members 34, 35, and 36 in FIG. 4. As one back panel member, e.g., back panel member 34, becomes saturated with bodily discharge it may be removed through opening ~~41~~ 41', exposing a fresh, dry back panel member, e.g., back panel member 35. Backsheet pocket 45 is preferably resilient and pliable, and is a substantially fluid impervious barrier over aperture ~~44~~ 44'', functionally becoming an extension of backsheet 62.

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Please replace the second full paragraph on page 8 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in July 2003.

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~~Back flap 42~~ Backsheet pocket 45 is reclosable and preferably resealable, and is preferably positioned so that as ~~flap 42~~ it is secured in a closed position a back panel member, e.g., back panel member 35, is urged into fluid communication with center section 50.

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Please replace the paragraph bridging from page 8 onto page 9 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in June 1998.

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FIG. 5 shows a preferred embodiment of the arrangement of back panels ~~30 panel 30'~~, again showing representative pack panel members 34, 35, and 36 in a layered relationship adjacent aperture ~~44~~ 44'' and in fluid communication with center section 50. It is understood that the description in terms of back panels is equally applicable to front panels 20. Removal of back ~~panels~~ panel members through opening ~~41~~ 41' may be facilitated by the use of pull tabs, e.g., tabs 46, which may be of any type known in the art, such as a strip of plastic film adhered to each back panel member. Additionally, back panel members may be separated from one another by a fluid impervious blocking layer 47 so that adjacent back panel members are not in fluid communication with each other. Blocking layer 47 may be any fluid impervious polymer film, such as film suitable for use as a fluid impervious backsheet. As one back panel member becomes saturated by absorption of fluid from center section 50, it may be removed, thereby exposing a substantially dry, fresh back panel member 35 for additional absorption from center section 50. In this manner, the absorbent article may be refreshed or regenerated for a prolonged period of time without removal from the wearer.

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Please replace the first full paragraph on page 9 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in November 1998.

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FIG. 6 shows a particularly preferred embodiment of the arrangement of back panel members. It is understood that the disclosure in terms of back panel members is equally applicable to front panel members **20**. Back panel members **35** and **36** are shown as representative of back panel component **30 30'** in a layered relationship with fluid impervious blocking layer **47** disposed between them. Blocking layer **47** is in a layered relationship with back panel members **35** and **36** and forms a fluid impervious layer between them. A portion of blocking layer **47** is preferably affixed, for example at attachment point **48**, to the back panel member being removed. As a substantially saturated back panel member, e.g. back panel member **35**, is ~~pulled through backsheet opening 41 by pull tab 46 removed~~, blocking layer **47** is ~~pulled through removed~~ as well, thereby leaving the adjacent back panel member, e.g., back panel member **36**, in position to be urged into fluid communication with center section **50** ~~through aperture 44~~.

Please replace the second full paragraph on page 9 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in June 1998.

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An alternative embodiment of the front and back panels ~~20 and 30~~ of an absorbent article of the present invention is shown in cross-section in FIG. 7. While illustrated in terms of back panel **30**, it is understood that the description is equally applicable to front panels. As shown in FIG. 7, rather than providing for a backsheet pocket **45** affixed to backsheet **62**, a back panel envelope **49** is provided. Back panel envelope **49** has a single back panel **30 30''** enveloped between a substantially fluid impervious layer **54** and a substantially fluid pervious layer **55**, and may be affixed, for example, by suitable adhesives **39** known in the art, to the backsheet 62 adjacent to the perimeter 38 of aperture 44 44''. Preferably back panel envelope **49** is removably affixed so that as back panel **30 30''** becomes saturated due to absorption of fluid from center section **50** it may be removed and replaced with a fresh, dry back panel envelope **49**.

Please replace the paragraph bridging from page 9 onto page 10 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in June 1998.

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An alternative embodiment of an absorbent article of the present invention has a fluid impervious backsheet without any discontinuities forming an opening through the backsheet. As shown in cross-section in FIG. 8, access to removable absorbent core members, e.g., members **34** and **35**, is provided by an opening **41''** between a topsheet **61** and backsheet **62 62'**. As more fully

described below with reference to FIG. 10, a fluid pervious topsheet is often used in absorbent articles as the wearer-contacting portion of the article. In an article of the present invention, the topsheet **61** and backsheet **62** may be separable at predetermined areas of the periphery **57**, near waistband region **63**, either in the front, back, or both. FIG. 8 shows the topsheet and backsheet separated in an open position. The opening **41** formed by the separation of the topsheet and backsheet allows removal or replacement of absorbent core components and is preferably resealable to provide for substantial fluid impermeability. The opening may be made resealable, for example, with a suitable adhesive **56** known in the art.

Please replace the first full paragraph on page 10 of the application as originally filed with the following rewritten paragraph.

Those skilled in the art will recognize additional embodiments of absorbent articles providing access to absorbent core components that do not depart from the scope of the present invention. For example, a back panel pocket **45** may be formed integrally with a backsheet **62** by plastically deforming the backsheet **62** in the area of the backsheet adjacent to the front and back panels **20** and **30**. A backsheet discontinuity in the form of an opening may then be made, by die cut, for example, to allow access to front or back panels. A flap similar to flap **42** of FIG. 1 may be provided along with fastening means **43**, to cover the opening in the backsheet.

Please replace the paragraph bridging from page 10 onto page 11 of the application as originally filed with the following rewritten paragraph.

FIG. 9 shows an exploded perspective view depicting the elements of an embodiment of a shaped absorbent core **10** such as may be used in an absorbent article according to the present invention, for example, in a disposable diaper. As depicted in FIGs. 1, 3 and 11, the absorbent core **10** comprises a front panel **20** and a back panel **30**, both made of absorbent material, preferably material suitable for fluid storage/redistribution. The front panel **20** has an outer front end **21**, an inner front end **22**, and a pair of sides **23**. Similarly, the back panel **30** has an outer end **31**, an inner back end **32**, and a pair of sides **33**. The front panel **20** has cut-out areas **40** at the intersection of the sides **23**, and the inner front end **22**. Similarly, the back panel **30** has cut-out areas **40** at the intersection of the sides **33**, and the inner back end **32**. The cut-out areas **40**, or notched portions, join the sides and the inner ends such that the resulting widths of the inner ends **22** and **32** are narrower than that of the outer ends **21** and **31**, respectively. By "notched" is meant that instead of a side and end meeting at a generally right angle, some amount of material is removed from the corner to produce an additional edge portion joining the side and end. The

912 additional edge portion of notch 40 may be generally straight, but in a preferred embodiment it is generally arcuate, as depicted in FIG. 11. It is also contemplated that the notch may have generally straight sides, with the limiting example resulting in a back or front panel being substantially trapezoidal-shaped.

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Please replace the first full paragraph on page 11 of the application as originally filed with the following rewritten paragraph.

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913 In a generally flat, unfolded state, the front panel 20 and back panel 30 are positioned such that the inner front end 22 of the front panel 20 is opposed to and spaced from the inner back end 32 of the back panel 30 as shown in FIGs. 9-13. The distance between the front and back panels may be varied as necessary. In general the distance will increase as the crotch length increases with the size of the absorbent article.

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Please replace the second full paragraph on page 11 of the application as originally filed with the following rewritten paragraph.

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914 ~~Center~~ The center section 50 is preferably generally rectilinear. By "generally rectilinear" is meant that preferably the center section is of constant width along its length. In general, however, the center section 50 need only span and overlap the front and back panels 20 ~~and 30~~, and may have a varying width along its length. When made by the method of the present invention, the center section 50 is generally rectilinear and extends from about the outer front end 21 of the front panel 20, to about the outer back end 31 of the back panel 30, as shown in FIG. 10. In use, however, the center section 50 need only be in fluid communication with the front and back panels 20 ~~and 30~~, preferably by overlapping in a layered relationship, and may not extend to the outer front end 21 or the outer back end 31.

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Please replace the third full paragraph on page 11 of the application as originally filed with the following rewritten paragraph.

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915 ~~Generally~~ The generally rectilinear center section 50 may comprise multiple strips of absorbent material, each having individual fluid acquisition, acquisition/distribution or storage/redistribution characteristics, as well as individual shape, width, length and thickness characteristics. For example, in a preferred embodiment shown in FIG. 9, two relatively thin, flexible, resilient, polymeric foam strips 51 and 51' are preferably made from the same storage/redistribution material as the front and back panels 20 and 30. The strips 51 and 51' and

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Cust'd front and back panels **20** and **30**, having similar absorptive characteristics and being in fluid communication, act as primary storage/redistribution members.

Please replace the fourth full paragraph on page 11 of the application as originally filed with the following rewritten paragraph.

916 In a preferred embodiment generally rectilinear strip **52** comprises a relatively thin, flexible, resilient, polymeric foam material having greater fluid acquisition or acquisition/distribution characteristics than strips **51** and **51'**, thereby tending to quickly acquire and partition body exudates for more rapid absorption into storage/redistribution layers **51** and **51'** and front and back panels **20** and **30**.

Please replace the first full paragraph on page 12 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in November 1998, March 2000, and July 2003.

917 As shown in FIG. 10, the backsheet **62** of an embodiment of an absorbent article of the present invention is generally made of substantially liquid impervious material, but it is not continuous. In particular, a discontinuity in backsheet **62** forms an aperture **44** which makes backsheet **62** liquid pervious in the area of aperture **44**. Adjacent backsheet **62** is disposed an absorbent core **10 10'** which may itself comprise one or more absorbent components in distinct layers. Adjacent absorbent core **10 10'** and preferably joined to the backsheet is a fluid pervious topsheet **61**. Preferably, topsheet **61** and backsheet **62** are joined directly at the absorbent article's periphery by adhesive or other attachment means known in the art. Topsheet **61** may also be adhered to the absorbent core. It is also contemplated that topsheet **61** may be unitary with one or more absorbent core components, thereby essentially reducing the absorbent article to two basic structural components: an absorbent core having core components with an integral topsheet, and a backsheet.

Please replace the second full paragraph on page 12 of the application as originally filed with the following rewritten paragraph.

918 FIG. 10 shows an exploded perspective view of an absorbent core **10 10'** as contemplated for use in a disposable diaper **60** according to the present invention. It should be understood, however, that the absorbent core **10 10'** shown is also useful for other absorbent articles such as incontinent briefs, incontinent pads, training pants, and the like. The diaper **60** depicted in FIG. 10 is a simplified absorbent article that could represent a diaper prior to its being placed on a wearer. It

should be understood, however, that the present invention is not limited to the particular type or configuration of diaper shown in FIG. 10.

Please replace the third full paragraph on page 12 of the application as originally filed with the following rewritten paragraph.

g19 Disposable diaper ~~60~~ 60 is shown in its uncontracted state (i.e., with generally all the elastic induced contraction removed) to more clearly show the construction of the diaper ~~60~~. The diaper ~~60~~ may comprise a substantially liquid pervious topsheet ~~61~~; a substantially liquid impervious backsheet ~~62~~ joined with the topsheet ~~61~~; and an absorbent core ~~10~~ 10 positioned between topsheet ~~61~~ and backsheet ~~62~~. Additional structural features such as elastic members and fastening means for securing the diaper in place upon a wearer (such as tape tab fasteners) may also be included.

Please replace the paragraph bridging from page 12 onto page 13 of the application as originally filed with the following rewritten paragraph.

g20 While ~~topsheet 61, backsheet 62, and absorbent core 10~~ the topsheet, the backsheet, and the absorbent core can be assembled in a variety of well known configurations, a preferred diaper configuration is described generally in U.S. Patent 3,860,003 to Buell, issued January 14, 1975, which is hereby incorporated herein by reference. Alternatively preferred configurations for disposable diapers herein are also disclosed in U.S. Patent 4,808,178 to Aziz et al., issued February 28, 1989; U.S. Patent 4,695,278 to Lawson, issued September 22, 1987; and U.S. Patent 4,816,025 to Foreman, issued March 28, 1989, all of which are hereby incorporated herein by reference.

Please replace the first full paragraph on page 13 of the application as originally filed with the following rewritten paragraph.

g21 FIG. 10 shows a preferred embodiment of the diaper ~~60~~ in which the topsheet ~~61~~ and the backsheet ~~62~~ are co-extensive and have length and width dimensions generally larger than those of the absorbent core ~~10~~. The topsheet ~~61~~ is joined with and superimposed on the backsheet ~~62~~ thereby forming the periphery of the diaper ~~60~~. The periphery defines the outer perimeter or the edges of the diaper ~~60~~.



Please replace the second full paragraph on page 13 of the application as originally filed with the following rewritten paragraph.

j22 The topsheet ~~61~~ is compliant, soft feeling, and non-irritating to the wearer's skin. Further, the topsheet ~~61~~ is liquid pervious permitting liquids to readily penetrate through its thickness. A suitable topsheet ~~61~~ can be manufactured from a wide range of materials such as porous foams, reticulated foams, apertured plastic films, natural fibers (e.g., wood or cotton fibers), synthetic fibers (e.g., polyester or polypropylene fibers) or from a combination of natural and synthetic fibers. Preferably, the topsheet ~~61~~ is made of a hydrophobic material to isolate the wearer's skin from liquids in the absorbent core ~~10~~. A particularly preferred topsheet ~~61~~ comprises staple length polypropylene fibers having a denier of about 1.5, such as Hercules type 151 polypropylene marketed by Hercules, Inc. of Wilmington, Delaware. As used herein, the term "staple length fibers" refers to those fibers having a length of at least about 15.9 mm (0.62 inches).

Please replace the third full paragraph on page 13 of the application as originally filed with the following rewritten paragraph.

j23 There are a number of manufacturing techniques which can be used to manufacture the topsheet ~~61~~. For example, the topsheet ~~61~~ can be woven, nonwoven, spunbonded, carded, or the like. A preferred topsheet is carded, and thermally bonded by means well known to those skilled in the fabrics art. Preferably, the topsheet ~~61~~ has a weight from about 18 to about 25 grams per square meter, a minimum dry tensile strength of at least about 400 grams per centimeter in the machine direction, and a wet tensile strength of at least about 55 grams per centimeter in the cross-machine direction.

Please replace the paragraph bridging from page 13 onto page 14 of the application as originally filed with the following rewritten paragraph.

j24 The backsheet ~~62~~ is made of a material substantially impervious to liquids and is preferably manufactured from a thin plastic film, although other flexible liquid impervious materials may also be used. Backsheet ~~62~~ prevents the exudates absorbed and contained in the absorbent core ~~10~~ from wetting articles which contact the diaper ~~60~~ such as bed sheets and undergarments. Preferably, the backsheet ~~62~~ is polyethylene film having a thickness from about 0.012 mm (0.5 mil) to about 0.051 centimeters (2.0 mils), although other flexible, liquid impervious materials can be used. As used herein, the term "flexible" refers to materials which are compliant and which will readily conform to the general shape and contours of the wearer's body. The polyethylene film of the backsheet

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may be used for flap 42 as well, ~~with suitable adhesive fastening making the backsheet of the present invention substantially impervious to fluids.~~

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Please replace the first full paragraph on page 14 of the application as originally filed with the following rewritten paragraph.

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A suitable polyethylene film is manufactured by Monsanto Chemical Corporation and marketed in the trade as Film No. 8020. The backsheet 62 is preferably embossed and/or matte finished to provide a more clothlike appearance. Further, the backsheet 62 may be "breathable," permitting vapors to escape from the absorbent core 10 while still preventing exudates from passing through the backsheet 62. It is contemplated that a backsheet that is highly breathable but substantially impervious to liquid may be desirable for certain absorbent articles.

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Please replace the second full paragraph on page 14 of the application as originally filed with the following rewritten paragraph.

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The size of the backsheet 62 is dictated by the size of the absorbent core 10 and the exact diaper design selected. In a preferred embodiment, the backsheet 62 has a modified hourglass-shape extending beyond the absorbent core 10 a minimum distance of at least about 1.3 centimeters to at least about 2.5 centimeters (about 0.5 to about 1.0 inch) around the entire diaper periphery. Additionally, according to the present invention more fully described below, the backsheet ~~has~~ may have at least one ~~opening 41 aperture~~ providing access through the backsheet to a portion of the absorbent core 10 (12/03).

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Please replace the third full paragraph on page 14 of the application as originally filed with the following rewritten paragraph.

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The topsheet 61 and the backsheet 62 are joined together in any suitable manner. As used herein, the term "joined" encompasses configurations whereby the topsheet 61 is directly joined to the backsheet 62 by affixing the topsheet 61 directly to the backsheet 62, and configurations whereby the topsheet 61 is indirectly joined to the backsheet 62 by affixing the topsheet 61 to intermediate members which in turn are affixed to the backsheet 62. In a preferred embodiment, the topsheet 61 and the backsheet 62 are affixed directly to each other in the diaper periphery by attachment means (not shown) such as an adhesive or any other attachment means as known in the art. For example, a uniform continuous layer of adhesive, a patterned layer of adhesive, or an array of separate lines or spots of adhesive can be used to affix the topsheet 61 to the backsheet 62.

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Please replace the paragraph bridging from page 14 onto page 15 of the application as originally filed with the following rewritten paragraph.

g 28  
Tape tab fasteners 65 are typically applied to the waistband region 63 of the diaper 60 to provide a fastening means for holding the diaper on the wearer. The tape tab fasteners 65 depicted are representative only. The tape tab fasteners can be any of those well known in the art, such as the fastening tape disclosed in U.S. Patent 3,848,594 (Buell), issued November 19, 1974, which is hereby incorporated herein by reference. These tape tab fasteners or other diaper fastening means are typically applied near the corners of the diaper 60.

Please replace the first full paragraph on page 15 of the application as originally filed with the following rewritten paragraph.

g 29  
Elastic members 69 are disposed adjacent the periphery of the diaper 60, preferably along each longitudinal edge 64, so that the elastic members tend to draw and hold the diaper 60 against the legs of the wearer. Additionally, elastic members 67 can be disposed adjacent either or both of the waistband regions 63 of the diaper 60 to provide a waistband as well as or rather than leg cuffs. For example, a suitable waistband is disclosed in U.S. Patent 4,515,595 (Kievit et al.), issued May 7, 1985, which is hereby incorporated herein by reference. In addition, a method and apparatus suitable for manufacturing a disposable diaper having elastically contractible elastic members is described in U.S. Patent 4,081,301 (Buell), issued March 28, 1978, which is hereby incorporated herein by reference.

Please replace the second full paragraph on page 15 of the application as originally filed with the following rewritten paragraph.

g 30  
The elastic members are secured to the diaper 60 in an elastically contractible condition so that in a normally unrestrained configuration, the elastic members effectively contract or gather the diaper 60. The elastic members can be secured in an elastically contractible condition in at least two ways. For example, the elastic members can be stretched and secured while the diaper 60 is in an uncontracted condition. Alternatively, the diaper 60 can be contracted, for example, by pleating, and the elastic members secured and connected to the diaper 60 while the elastic members are in their unrelaxed or unstretched condition. The elastic members may extend along a portion of the length of the diaper 60. Alternatively, the elastic members can extend the entire length of the diaper 60, or any other length suitable to provide an elastically contractible line. The length of the elastic members is dictated by the diaper design.

Please replace the third full paragraph on page 15 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in June 1998.

j31 In use, the diaper **60** is applied to a wearer by positioning one waistband region under the wearer's back, and drawing the remainder of the diaper **60** between the wearer's legs so that the other waistband region is positioned across the front of the wearer. The tape-tab **65** or other fasteners are then secured preferably to outwardly facing areas of the diaper **60**, as ~~show~~ shown in FIG. 2 and 4, for example. In use, the disposable diapers or other absorbent articles of the present invention tend to more quickly and efficiently distribute and store liquids and to remain dry due to the high absorbent capacity of the fluid absorbent members. Disposable diapers incorporating the fluid absorbent members of the present invention can also be thinner and more flexible.

Please replace the paragraph bridging from page 15 onto page 16 of the application as originally filed with the following rewritten paragraph.

j32 When used as an absorbent core in a disposable diaper **60**, a preferred embodiment of the core **10 10'** is positioned such that acquisition/distribution strip **52** is in fluid contact with topsheet **61**, and serves to quickly acquire and partition body exudates from the wearer's body to the generally more absorptive storage/redistribution strips **51** and front and back panels, **20** and **30**. The front panel **20** generally corresponds to the portion of the disposable diaper worn in the front of the wearer, with the outer front end **21** being generally near the wearer's waist area. Similarly, the back panel **30** corresponds to the portion of the disposable diaper worn in the back of the wearer, with the outer back end **31** being generally near the wearer's waist area. Generally rectilinear center section **50** has a width **53** corresponding to a suitable width for the crotch area **66** of a disposable diaper. As well, the length of generally rectilinear center section **50** may be varied to provide a suitable fit for various wearer sizes.

Please replace the second full paragraph on page 16 of the application as originally filed with the following rewritten paragraph.

j33 The number and placement of strips **51** or **52** of generally rectilinear center section **50** may be varied to achieve desired characteristics such as thinness, softness, flexibility, or beneficial fluid acquisition, distribution, and storage rates. For example, FIG. 12 shows in cross-section an embodiment using one acquisition/distribution strip **52** and one storage/redistribution strip **51** in center section 50'', both placed over front and back storage/redistribution panels **20** and **30**, resulting in a thin, flexible absorbent core **10 10''**. By "over" is meant the side of the absorbent

g33 core of the invention corresponding to the wearer's body when used in an absorbent article such as a disposable diaper.

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Please replace the paragraph bridging from page 16 onto page 17 of the application as originally filed with the following rewritten paragraph.

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g34 The number of layers of the front and back panels ~~20 or 30~~ may also be varied to achieve desired characteristics such as beneficial fluid acquisition and distribution rates, as well as capacity and storage rates. If more than one layer of absorbent material is used in the front or back panels, the panels are herein referred to as components, and the individual layers are herein referred to as members. For example, FIG. 13 shows in cross-section an additional embodiment corresponding to the general top view of FIG. 11. FIG. 13 depicts two members of front and back panels ~~20 20'~~ and ~~30 30''~~, ~~corresponding, for example, to back panel members 34 and 35, shown in FIG. 4.~~ As shown in FIG. 13, both back panel members may be placed under the center section ~~50~~. As described above with reference to FIGs. 5 and 6, the members of a multi-layer front or back panel may be separated by fluid impervious material with beneficial results.

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Please replace the first full paragraph on page 17 of the application as originally filed with the following rewritten paragraph.

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g35 In summary, the absorbent core ~~10~~ comprises a plurality of discrete components, each component capable of having distinct fluid acquisition, acquisition/distribution, or storage/redistribution characteristics. In the context of the present invention, it should be noted that the term "fluid" means "liquid." So long as the acquisition, acquisition/distribution, and storage/redistribution components are in fluid communication with adjacent components, they may be positioned relative to one another in a wide variety of configurations. Representative materials suitable for use with the present invention will now be described in greater detail.

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Please replace the second full paragraph on page 17 of the application as originally filed with the following rewritten paragraph.

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g34 As described above, the absorbent core ~~10~~ comprises a plurality of discrete components, each component may comprise discrete members, each capable of having distinct fluid acquisition, acquisition/distribution, or storage/redistribution characteristics. The components or members may be made of any absorbent material or combination of materials having enough structural integrity to be handled as a discrete unit. Typical materials known in the art may be used, such as fibrous nonwoven materials, fibrous wet-laid web materials, and combinations of fibrous materials having absorbent gelling materials dispersed upon or within the fibrous structure. If necessary,

234 such fibrous nonwoven materials may be formed into a pouch, of material, being substantially enveloped a fluid pervious web that provides the structural integrity for removal and replacement into the article of the present invention.

Please replace the paragraph bridging from page 24 onto page 25 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in July 2003.

937 A preferred method of making the shaped absorbent core suitable for use with the present invention is now described with reference to FIGs. 14-19. FIG. 14 schematically shows a representative apparatus 70 suitable for accomplishing the method of forming the absorbent core components of the preferred embodiment of the present invention as depicted in FIG. 9 and 10. The method depicted in FIG. 14 and described in detail below can be easily modified to produce absorbent cores comprising different combinations and placement of absorbent members, such as those depicted in FIGs. 12 and 13. Representative modifications are shown schematically in FIG. 15 and, unless otherwise disclosed, can be understood with reference to the description of the method of FIG. 14 since like numerals identify like elements. The method is not limited to nonwoven web materials or absorbent polymeric foam materials, but is suitable for use with any generally absorbent material formed into webs, either nonwoven or woven, fibrous or polymeric, as known in the art that may be supplied on rollstock and have sufficient integrity to be processed by the method disclosed.

Please replace the first full paragraph on page 25 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in June 1998 and July 2003.

938 A first relatively narrow rectilinear web 81 is unwound from a supply roll 71. Web 81 has a width generally corresponding to width 53 of the generally rectilinear center section 50 50', as shown in FIGs. 1, 3, 9 and 10. Web 81 comprises a material suitable for use as an acquisition/distribution layer 52 of the preferred embodiment as shown in FIGs. 9 and 10. Web 81 is guided through entry point 100 onto a conveyor 102 where it is positioned for further processing as described below.

Please replace the second full paragraph on page 25 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in July 2003.

939 In a preferred embodiment, second and third relatively narrow rectilinear webs 82 and 83, comprised of a material suitable for acquisition/distribution or storage/redistribution of aqueous

g39 fluid, are unwound from supply rolls 72 and 73, respectively. Webs 82 and 83 correspond to storage/redistribution layers 51 and 51' of FIGs. 9 and 10 and may have a width generally corresponding to width 53 of the center section 50 50'. Webs 82 and 83 are guided through entry point 100 onto a conveyor 102 where they are positioned in layers upon web 81 for further processing as described below.

Please replace the third full paragraph on page 25 of the application as originally filed with the following rewritten paragraph:

g40 A relatively wide continuous rectilinear web 84 of absorbent material having a longitudinal axis and lateral sides is unwound from a supply roll 74. In a preferred embodiment, web 84 is suitable for use as a storage/redistribution member of the absorbent core 10, and is of a width suitable for forming into the front panel 20 and back panel 30 shown in FIGs. 1, 3, 9 and 10. The lateral sides of web 84 generally correspond to the sides 23 and 33 depicted in FIG. 11.

Please replace the third full paragraph on page 26 of the application as originally filed with the following rewritten paragraph.

g41 The material being carried on conveyor 102 is fed into a second slip and cut assembly 150 for making transverse cuts severing all the layers of material. Cutting roller 152 has a diameter corresponding generally to the distance between the transverse centerlines 131 of discrete sections 85 as shown in FIG. 18. Roller 151 serves as a platen for a cutting blade 153 attached to cutting roller 152. Cutting blade 153 completely severs the layers at or near transverse centerlines 131 of discrete sections 85. Upon exiting the second slip and cut assembly 150, the absorbent material has been formed into the individual absorbent cores 10 10' of the present invention. Various known methods may be used to separate the individual absorbent cores 10, such as by varying the relative speeds of conveyors 102 and 160. The individual absorbent cores 10 are carried by conveyor 160 for further processing into absorbent articles, if necessary, and appear on conveyor 160 in plan view as shown in FIG. 19.

Please replace the paragraph bridging from page 26 onto page 27 of the application as originally filed with the following rewritten paragraph:

g42 As shown in FIG. 19, it is not necessary for the length of front panel 20 measured from outer front end 21 to inner front end 22 to equal the length of the back panel 30 measured from its outer back end 31 to its inner back end 32. The position of the layered material on conveyor 102 in relation to the second slip and cut assembly 150 determines the relative lengths of front panel 20

and back panel **30**. In a preferred embodiment of the present invention the back panel **30** is longer than the front panel **20** as depicted in FIG. 19. Such a configuration lends itself to a better fit when the absorbent core **10** is used in a disposable diaper.

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Please replace the first full paragraph on page 27 of the application as originally filed with the following rewritten paragraph.

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843 As shown in FIGs. 14 and 15, the length of interval **130** may be varied to produce the desired length of center section **50**. It is desirable to be able to vary the length of center section **50** of an absorbent core **10** for use in disposable diapers to accommodate the difference in sizes of children or adults using such diapers.

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